AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A pharmaceutical composition for use in decreasing DNA damage in a subject with age associated DNA damage comprising an effective daily dose of about 0.1 to 20 mg lutein, ~~and at least one of the group consisting of~~ beta-carotene and lycopene, wherein the beta-carotene and lycopene are present in amounts sufficient to act synergistically with lutein to decrease age associated DNA damage in the subject.

2. (Original) The pharmaceutical composition of claim 1, wherein the composition further comprises at least one of about 0.1 mg to 20 mg beta-carotene or about 0.1 to 20 mg lycopene.

3. (Original) The pharmaceutical composition of claim 1, wherein the composition further comprises a lipophilic component.

4. (Original) The pharmaceutical composition of claim 1, wherein the composition further comprises a carotenoid-containing dry powder in the form of a multicore structure in which at least two cores of a multicore structure comprise one or more different carotenoids of the group consisting of substantially purified lutein, beta-carotene, and lycopene.

5. (Original) The pharmaceutical composition of claim 4, wherein the carotenoid-containing dry powder is formed into at least one of drink preparations, tablets, sugar coated tablets, hard gelatin capsules, soft gelatin capsules, and cellulose capsules.

6. (Canceled)

7. (Currently Amended) The nutritional composition of claim ~~6~~1, wherein the daily dose of ~~at least two~~the carotenoids ~~is~~ in the composition ~~selected~~ from about 0.1% to 50% by weight beta-carotene, about 0.1% to 50% by weight lycopene, and about 0.1% to 50% by weight lutein.

8. (Currently Amended) A method of decreasing oxidative DNA damage in a subject with a free-radical associated disorder comprising: administering a synergistic combination of carotenoids to the subject, wherein the synergistic combination comprises about 0.1 to 20

mg lutein, and ~~at least one of the group consisting of~~ sufficient amounts of beta-carotene and lycopene to act synergistically with lutein to decrease oxidative DNA damage in the subject.

9. (Original) The method of claim 8, wherein the synergistic combination of carotenoids is selected from the group consisting of a daily unit dose of about 0.1 mg to 20 mg beta-carotene, and about 0.1 to 20 mg lycopene to the subject.

10. (Original) The method of claim 8, wherein the method comprises administering about 0.5 mg to 10 mg betacarotene, about 0.5 to 10 mg lycopene, and about 0.5 to 10 mg lutein to the subject.

11. (Original) The method of claim 8, wherein the synergistic combination of carotenoids is selected from the group consisting of a daily unit dose of about 1 part of beta-carotene, 0.02 to 20 parts of lycopene and 0.02 to 20 parts of lutein.

12. (Original) The method of claim 8, wherein the synergistic combination of carotenoids is selected from the group consisting of a daily unit dose of about 1 part of beta-carotene, 0.1 to 2 parts of lycopene and 0.1 to 2 parts of lutein.

13. (Original) The method of claim 8, wherein the method further comprises administering a lipophilic component, such that antioxidant capacity in the aqueous and lipid compartments of plasma is increased.

14. (Original) The method of claim 8, wherein the method further comprises administering a carotenoid containing dry powder in the form of a multicore structure in which at least two cores of a multicore structure comprise one or more different carotenoids of the group consisting of substantially purified lutein, beta-carotene, and lycopene.

15. (Original) The method of claim 14, wherein the method comprises administering the carotenoid-containing dry powder in a form selected from the group consisting of drink preparations, tablets, sugar coated tablets, hard gelatin capsules, soft gelatin capsules, and cellulose capsules.

16. (Currently Amended) A method of reducing effects of aging in a subject with age

associated DNA damage comprising: administering a synergistic combination of carotenoids to the subject, wherein the synergistic combination comprises about 0.1 to 20 mg lutein, and sufficient amounts of ~~at least one of the group consisting of~~ beta-carotene and lycopene to act synergistically with lutein, whereby age associated DNA damage in the subject is decreased thereby reducing the effects of aging.

17. (Original) The method of claim 16, wherein the synergistic combination of carotenoids is selected from the group consisting of a daily unit dose of about 0.1 mg to 20 mg beta-carotene, and about 0.1 to 20 mg lycopene to the subject.

18. (Original) The method of claim 16, wherein the method comprises administering about 0.5 mg to 10 mg beta-carotene, about 0.5 to 10 mg lycopene, and about 0.5 to 10 mg lutein to the subject.

19. (Original) The method of claim 16, wherein the method comprises a carotenoid-containing dry powder in the form of a multicore structure in which at least two cores of a multicore structure comprise one or more different carotenoids of the group consisting of substantially purified lutein, beta-carotene, and lycopene.

20. (Original) The method of claim 19, wherein the method comprises administering the carotenoid-containing dry powder in a form selected from the group consisting of drink preparations, tablets, sugar coated tablets, hard gelatin capsules, soft gelatin capsules, and cellulose capsules.